

A NEW SPIDER OF THE GENUS *LEPTONETA* (ARANEAE: LEPTONETIDAE) FROM KOREA

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Synopsis

PAIK, Kap Yong & Bo Keun SEO (Department of Biology, Science and Engineering College, Keimyung University, Taegu 630, Korea): A new spider of the genus *Leptoneta* (Araneae: Leptonetidae) from Korea. *Acta arachnol.*, 30: 65-70 (1982)

Up to the present, six species of the genus *Leptoneta* SIMON, 1872, *L. coreana*, *L. hogyegulensis*, *L. simboggulensis*, *L. soryongensis*, *L. yongdamgulensis* and *L. hongdoensis*, have been recorded in Korea. In this paper, the authors described a new species, *L. namhensis*, from Namhae-do Isl., Kyeongsangnam-do, Korea. The present species is very similar to *L. tsushimensis* YAGINUMA, 1970 from Tsushima, Japan, but can be distinguished by the structure of tibial spur of male palp and the number of teeth of fang furrow.

Up to the present, six species of the genus *Leptoneta* SIMON, 1872 have been known in Korea. Five of them, *L. coreana*, *L. hogyegulensis*, *L. simboggulensis*, *L. soryongensis* and *L. yongdamgulensis*, were recorded from caves (PAIK, YAGINUMA and NAMKUNG, 1969, pp. 799, 803, 804, 806): the rest one species, *L. hongdoensis*, was recorded from out of caves (PAIK, 1980, p. 161). In the present paper, the authors described a new species belonging to the genus *Leptoneta*.

Leptoneta namhensis PAIK et SEO, n. sp.

(Figs. 1-12)

Measurements (mm.).

MALE (*holotype*): Total length 2.15; body length 1.95; carapace length 0.89, width 0.74; sternum length 0.57, width 0.52; labium length 0.10, width 0.15;

endite length 0.34, width 0.15; cephalic width 0.49; anterior eye row 0.16; posterior eye row 0.09; cheliceral length 0.48, width 0.18; abdominal length 1.19, width 0.82. Leg I 8.95 (2.45, 0.29, 2.87, 2.15, 1.24), II 6.30 (1.78, 0.30, 1.93, 1.41, 0.99), III 5.20 (1.48, 0.25, 1.38, 1.18, 0.96), IV 6.64 (1.90, 0.25, 2.03, 1.53, 0.96). Palp 2.08 (0.77, 0.42, 0.32, 0.57).

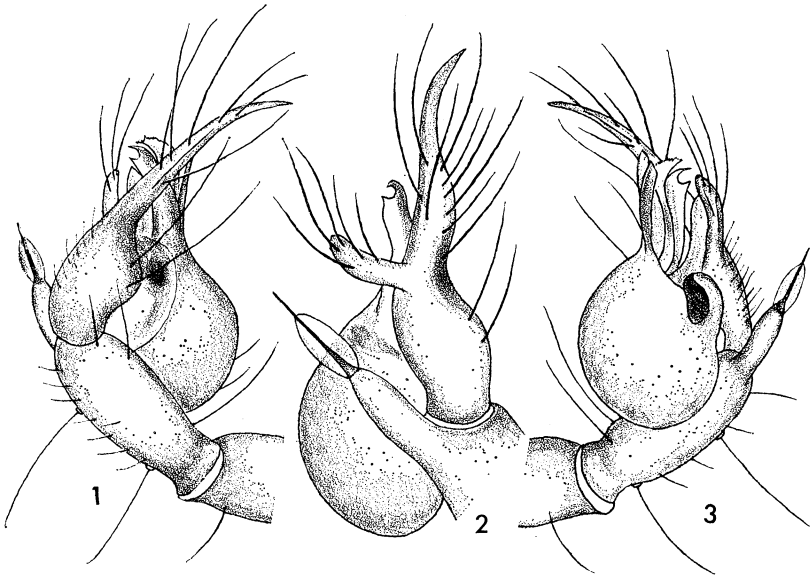
FEMALE (*allotype*): Total length 2.03; body length 1.88; carapace length 0.84, width 0.72; sternum length 0.53, width 0.50; labium length 0.09, width 0.13; endite length 0.31, width 0.12; cephalic width 0.40; anterior eye row 0.16; posterior eye row 0.09; cheliceral length 0.49, width 0.20, abdominal length 1.26, width 1.01. Leg I 6.49 (1.58, 0.25, 2.15, 1.53, 1.01), II 5.02 (1.43, 0.25, 1.48, 1.09, 0.82), III 4.10 (1.16, 0.25, 1.11, 0.94, 0.69), IV 5.47 (1.56, 0.27, 1.65, 1.24, 0.82). Palp 1.64 (0.54, 0.18, 0.43, 0.54).

Description.

MALE (*holotype*): Carapace yellowish brown; the margins, median groove and radial furrows suffused with dark gray: longer than the width in the index 83: cephalic width index 66. All six eyes well developed: posterior eyes the smallest, remainder subequal. Eye ratio, $AME > ALE = PME$ (6:5:5×4). Anterior eyes almost in contact with each other, arranged semicircularly. Anterior eyes enclosing black field and posterior eyes narrowly ringed with black. Axes of anterior lateral eyes intersect backward. Posterior eyes contiguous, their axes parallel; separated from anterior lateral eyes by the minor axis of posterior eye. Anterior lateral eyes separated from each other by 1.4 times their diameter. Length of eye area 0.22 times the length of carapace (20:89); eye row index 177. Clypeus equal to length of eye area. Chelicerae brown; with 8 teeth on promargin of fang furrow, 7 extremely small denticles barely visible on posterior margin under high magnification. Endite brown, longer than wide in the index 44; with a protuberance near the base of innerside of endite. Labium brown; semicircular, wider than long in the index 150. Sternum brown, suffused with dark gray; shield-shaped, slightly longer than wide in the index 91; bluntly pointed between 4th coxae, which are separated 0.8 times their diameter.

Legs pale brown. Upper claw with 7 pectinations, lower claw with only one pectination. Leg formula, 1423. Leg formular index are 100:70:58:74. Leg I/c 10.06. Fem. I/c 2.75. Leg. I pat.+tib./c 3.49. Fem. I l/d 15.31. Tib. I l/d 31.89.

Abdomen grayish brown, with a pale longitudinal dorso-median line; ovoid, longer than wide in the index 67. Colulus evident, without seta.



Figs. 1-3. *Leptoneta namhensis* n. sp. 1-3. Left palpal organs. 1. Inner view. 2. Dorsal view. 3. Ectal view.

Male palp. Palp yellowish brown; longer than the length of carapace (palp/c 2.34); order of the length of segments, Fem.>Tar.>Pat.>Tib. Femur without rows of short spine. Tibia with two dorsal trichobothria and a long retrolateral spur bearing an apical spine, which are surrounded the proximal two thirds with a transparent sheath. Cymbium as illustrated in Fig. 1, 2 and 3.

FEMALE (allotype): Essentially similar to male in shape and color. Legs and palpus shorter than the male (Table 1).

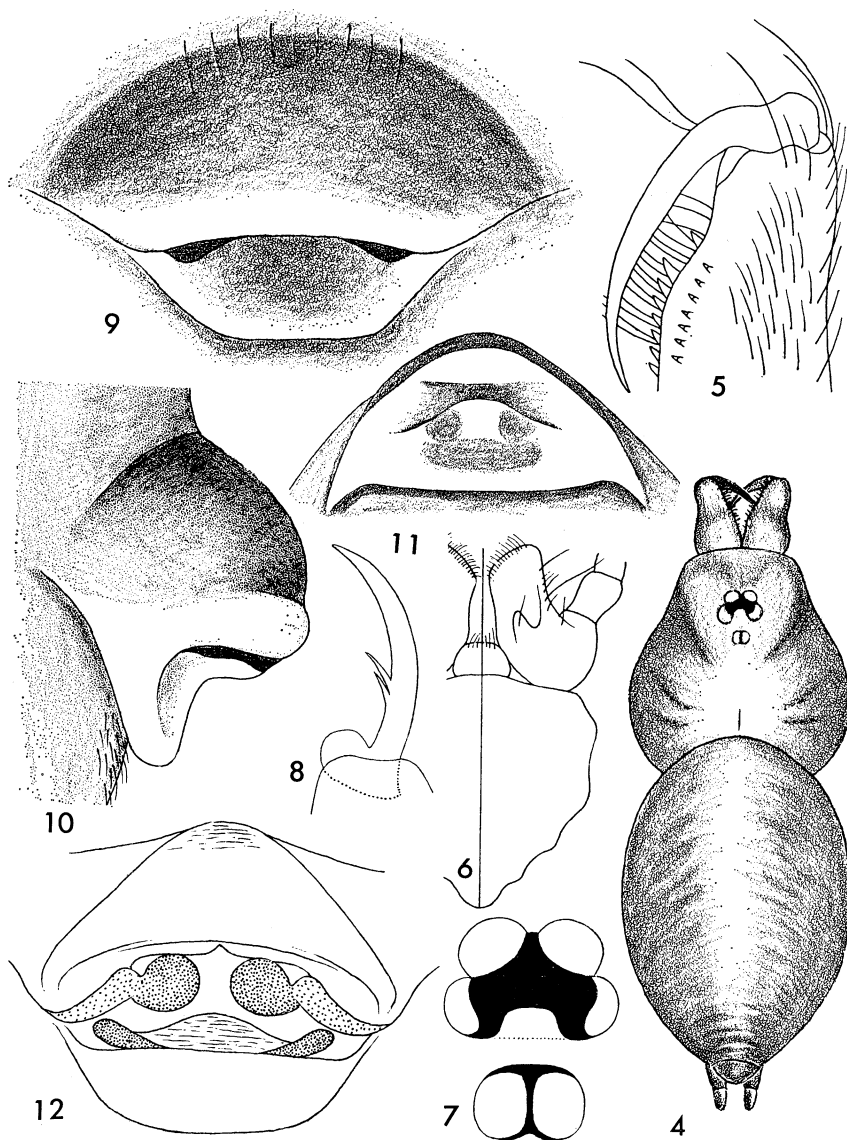
Palp longer than carapace. Order of the length of segments Fem.>Pat.>Tib. Palpal claw with 2 teeth.

Epigynum and genitalia as illustrated in Figs. 9, 10, 11 and 12.

DIAGNOSIS: The present species is very similar to *L. tsushimensis* YAGI-

Table 1. Comparative table of the size of the leg and palp in both sexes.

Sex	Leg I/c	Fem. I/c	Leg I pat.+ tib./c	Fem. I 1/d	Tib. I 1/d	Palp/c
♂	10.06	2.75	3.55	15.31	31.89	2.34
♀	7.73	1.88	2.86	9.88	23.89	1.95
♀/♂ %	77%	68%	81%	65%	75%	83%



Figs. 4-12. *Leptoneta namhensis* n. sp. 4. Male (holotype), general appearance. 5. Chelicera, male, inner view. 6. Sternum, endite and labium of male, left half. 7. Eye area, male, dorsal view. 8. Claw of female palp. 9-11. Epigynum. 9. Ventral view. 10. Lateral view. 11. Posterior view. 12. Female genitalia, ventral view.

NUMA, 1970 from the Islands of Tsushima, Japan. It is, however, easily discriminated from the latter species on the following characteristics.

1. Cymbium very slender and taper off to a point.
2. The spine of tibial spur of male palp surrounded with a transparent sheath.
3. The detailed structure of apical division of the bulb more complicated than in the latter species.
4. Fang furrow armed with 8 promarginal teeth and 7 retromarginal denticles. The latter species, however, armed with 9 promarginal teeth and 4 retromarginal denticles.
5. Epigynum somewhat evident in ventral aspect, and protruded in lateral aspect.

ETYMOLOGY. The name of present species is derived from the Namhae-do Isl., where the type specimen was collected.

SPECIMENS EXAMINED. *Holotype*: Male, 1-V-1981, Daegog-ri, Gohyeon-myeon, Namhae-gun, Kyungsangnam-do, Bo Keun SEO leg. *Allotype*: Female, same data as holotype. *Paratype*: 1♀, 1♂, Same data as holotype; 7♀♀, 4♂♂, 15-VII-1981, locality and collector same as the holotype.

NATURAL HISTORY. Specimens have been taken under piled old roof tiles at 400 meter above the sea level.

TYPE DEPOSITORY. The type-series of the new species is deposited in the collection of the Kyungpook University, Taegu, Korea.

摘 要

白 甲 鱗 (韓国大邱市中区西也洞20, 〒630)・徐普根 (韓国大邱市 啓明大学校理工大学 生物学教室, 〒630): 韓国産マシラグモ (*Leptoneta*) 属の1新種。

マシラグモ (*Leptoneta*) 属の1新種 *L. namhensis* n. sp. を記載した。本種は、一見、対馬産の *L. tsushimensis* YAGINUMA, 1970 に似ているが、雄の触肢の杯葉がより細長く、脛節の距の刺が透明な鞘で包まれていることと、雌の外雌器がかなり明かに認められること、貯精囊の形態等で識別される。これで韓国のマシラグモ属は7種になるがそのうち5種は洞窟性のものであり、*L. hongdoensis* と本種は地表性のものである。

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